

17W — PPL17W Series

Mini. Size, High efficiency, No flicker, Constant current LED driver



Product family features

- Drive Mode: No Flicker Constant Current
- -Technology: Boost + Flyback Technology
- -Input Voltage: 220 to 240Vac (Max. Range: 198~264Vac)
- -Output Frequency: 47-63Hz
- -Output Power: 17Watt Max
- -Output Voltage: 9Vdc to 42Vdc
- -Output Voltage: 250mA to 400mA (2 DIP,4 current outputs)
- Efficiency: Up to 85.5%
- -Warranty: 3years
- No flicker constant current
- A rated lifetime of 30,000 hours @ Tc = $85 \degree$ C
- -Safety isolation between primary and secondary
- Surge: AC Power Line: line to line $1KV/2\Omega 8/20US$
- -Accord to RoHS Standard
- IP20, Suitable for use in dry environment
- Suitable for Class II luminaries

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Areas of application

- -Education lighting
- -Office lighting



Technical data

Electrical Parameter

Product Modle	Max. output Power (W)	Output Voltage Range (Vdc)	output current (mA)	Current Accuracy (typ.)	Max Eff
PPL17W-42-C0400-D-A	17	9-42	400	±5%	85.5%
PPL17W-42-C0400-D-B	17	9-42	400	±5%	85.5%
PPL17W-42-C0400-A	17	9-42	400	±5%	85.5%
PPL17W-42-C0400-B	17	9-42	400	±5%	85.5%
PPL15W-42-C0350-A	15	9-42	350	±5%	84.8%
PPL15W-42-C0350-B	15	9-42	350	±5%	84.8%
PPL13W-42-C0300-A	13	9-42	300	±5%	84%
PPL13W-42-C0300-B	13	9-42	300	±5%	84%
PPL11W-42-C0250-A	11	9-42	250	±5%	83%
PPL11W-42-C0250-B	11	9-42	250	±5%	83%

Note: "-A": EMI uses Class I/Class II test - the product input has a common mode inductor, "-B": EMI uses Class II test, the product input lacks a common mode inductor "-D": The model with DIP switch to change the current, no "-D" is a constant current product

Technical data

Programmable Output Parameters with DIP

Product Modle	Output Voltage Range	output current (mA)	DIP1	DIP1	Current Accuracy	Output Power	Max Eff
PPL17W-42-C0400-D-A PPL17W-42-C0400-D-B	9-42V	400	ON	ON	±5%	16.8W	85.5%
		350	ON	OFF	±5%	14.7W	84.8%
		300	OFF	ON	±5%	12.6W	84%
		250	OFF	OFF	±5%	10.5W	83%

Electrical Specifications

	Parameter	Min	Тур	Max	Notes / Conditions	
Input	Input Voltage	198V		264V		
	Input Frequency	47Hz	50/60Hz	63Hz		
	Input AC Current			0.1A	Measured at 230Vac 50/60Hz Input, Output Full Load	
	No-load power			0.5W	No-load	
	Inrush Current (Peak)		13A / 350uS		Measured at 50% Ipeak& 240Vac / 50Hz Input, Output Full Load	
	Leakage Current			2mA	Measured at 230Vac Input, Output Full Load	
	THD			20%	Measured at 230Vac Input, Output Full Load	
	Power Factor (PF)	0.9			Measured at 230Vac Input, Output Full Load	
	DC Output Voltage	Per Table	Per Table	Per Table	Per Tables on Page 1	
	PPL17W-42-C0400-D-A PPL17W-42-C0400-D-B	-5%	400mA	+5%	Pin1-ON, Pin2-ON	
			350mA		Pin1-OFF, Pin2-ON	
			300mA		Pin1-ON, Pin2-OFF	
			250mA		Pin1-OFF, Pin2-OFF	
	PPL17W-42-C0400-A		400mA	+5%	"-D": The model with DIP switch to change the currer no "-D" is a constant current product.	
	PPL17W-42-C0400-B	-5%	400mA			
	PPL15W-42-C0350-A		350mA			
Output	PPL15W-42-C0350-B		350mA			
Out	PPL13W-42-C0300-A		300mA			
	PPL13W-42-C0300-B		300mA			
	PPL11W-42-C0250-A		250mA			
	PPL11W-42-C0250-B		250mA			
	Flickering Index (Vpk-pk)			1% Vo	Output Full Load. 20MHz BW, Full load output in parallel with 0.1uF & 10uF CAP Flickering Index is defined as [(Ymax-Ymin)/	
	Flickering Index (Ipk-pk)			1% Lo	(Ymax+Ymin)] * 100%. Y may be V or I	
	Line Regulation	-3%		+3%	Measured at 220, 230, 240Vac / 50Hz Input, Output Full Load	
	Load Regulation	-5%		+5%	Measured at 220, 230, 240Vac / 50Hz Input, Output Full Load	
	Start-up Time		420ms	500ms	Measured at 220, 230, 240Vac / 50Hz Input, Output Full Load	
	Output Overshoot	-2%		+10%	Measured at 220, 230, 240 Vac Input, When power on or off	

Technical data

Electrical Specifications

Protection	Output Short Circuit (SCP)			No Damage. Auto recovery after short is removed
	Output Over Current (OCP)		+10% lo	Constant Current Limiting circuit
	Output Over Voltage (OVP))	120% Vo	No Damage. Auto recovery after the abnormal disappearance
	Cooling	Convection		
General	MTBF	410,000 hours		Measured at 230Vac input, 100% Load and Ta=25°C(MIL-HDBK-217F)
Gen	Life Time	30,000 hours		Measured at 230Vac input, 100% Load and TC=85°C
	Noise	< 24dBA		Class A, no more than one meter away
Environmental	Operating Temperature (Ta)	-20°C	+50°C	@230Vac. This is a reference range. Tc controls temperature range
	Case Temperature (Tc)	-20°C	+90°C	Measured at location specified on case
	Storage Temperature (Ts)	-25°C	+85°C	Non operating temperature range
	Operating Humidity	5% RH	95% RH	Relative Humidity. Non-condensing
	Vibration	5Hz	55Hz	2G, 10 minutes / 1 cycle, period 30 minutes, each along X, Y, Z axis

	Category		Standards / Notes
Safety Compliance	Withstand Voltage		Input to Output 3750Vac
	Case – Output		1.5KVac
	Case - Input		1.5KVac
	Isolation Resistance		Input to Output >10MΩ, 500Vdc @25°C, 70% RH
EMC Compliance	EMI	ССС	GB19510.14-2009, GB19510.1-2009
		CE	EN55015:2013+A1:2015, EN 61000-3-2:2014, EN 61000-3-3:2013. RED 2014/53/EU
		EN 61000-4-3	Radio-Frequency Electromagnetic Field Susceptibility Test-RS
		EN 61000-4-4	Electrical Fast Transient / Burst-EFT
	EMS	EN 61000-4-5	Surge Immunity Test: AC Power Line: line to line 1.0 KV/2 Ω
		EN 61000-4-6	Conducted Radio Frequency Disturbances Test-CS
		EN 61547	Electromagnetic Immunity Requirements Applies to Lighting Equipment

Note: The above test data were carried out under the Ta=25 $\rm C\,$ except the labeled temperature

Product datasheet Typical Applications DC+ = Red N** N** 11 14 N44 L = Brown PPL17W-42-C0400-D-A DC output **Constant Current Driver** AC input N₂₆ N₂₆ N₂₆ N₂₆ N = Blue DC- = Black Order ID

1.P/N: PPL17W-42-C0400-D-A Description:17W, Max. 42Vdc, Constant current value is 400mA, constant current mode 2.P/N: PPL17W-42-Cxxxx-x Note: 17W, Max. 42Vdc, Constant current value is 250-400mA, constant current mode

Appearance information

Product Size



Note:

The independent LED drive conforms to the EMC standard. But it is not guaranteed to be qualified, when the drive is mounted in the LED fixture

Please forgive us for any discrepancy due to the update of the specifications or the upgrade of the product. If you need the latest information, please contact our marketing department

Characteristic Curve



Lifetime Curve



Installation

AC input wires cross section: 0.75-1.52

DC output wires cross section: 0.5-1.52

This product for indoor use only, it can be installed and fixed in the luminaires, connected with the wire. The max length of output line should be less than 2m.

Note: Since the DC output line is permanently connected and shorter than 3 m, therefore the disturbance voltage of local wired port shall not be required